



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,313	09/16/2003	Andreas Michael Albat	C525 0333	1794

7590 03/20/2006

Gavin N Manning Esq
Oyen Wiggs Green and Mutala
Suite 480 - The Station
601 West Cordova Street
Vancouver, BC V6B 1G1
CANADA

EXAMINER

MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
----------	--------------

3653

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1, 3-10 and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claim 1 and its dependent claims, independent claim 1 recites "at least one registration feature for **aligning the trailing edge** of the media sheet **in a direction** that is parallel to the print axis of the printer, and a mechanism for adjusting **the direction of alignment of the registration feature** so that the direction is aligned with the print axis of the printer". (emphasis added). It is unclear which direction is referred to in the above underlined portion of claim 1. Is this the direction of aligning the trailing edge of the media sheet? Is this the direction of alignment of the registration feature?

Claim 1 recites the limitation "the direction of alignment" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3653

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-6, 8-10 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,511,904 (Takahashi).

Regarding the independent claim 1, Figs. 1, 3 and 4 show an alignment device (including 104 and 105) for aligning a media sheet (18) with a print axis of a printer (i.e., axis of element 42), the media sheet (18) having a leading edge (near 78) and a trailing edge (near 104), the device including at least one registration feature (including 104 and 105) for **aligning the trailing edge** (near 104 in Fig.1) of the media sheet (18) in a **direction** that is parallel to the print axis of the printer (i.e., axis of element 42), and a mechanism (103 and 107) for adjusting the **direction of alignment** (i.e., adjusting outward for longer length sheets and/or inward for shorter length sheets) **of the registration feature** (including 104 and 105) so that **the direction** (i.e., the direction of aligning the trailing edge of the media sheet) is aligned with the print axis of the printer wherein the registration feature (including 104 and 105), when in use, is stationary relative to the printer.

To clarify, claim 1, as now amended, can be interpreted to mean that the mechanism adjusts the direction of alignment of the registration feature so that the direction of the trailing edge of the media sheet is aligned with the print axis of the printer. First, it is noted that the dictionary defines the word mechanism as "a. A mechanical device: MACHINE. b. Arrangement of machine parts." Based on this definition, it is the examiner's position that the elements (103 and 107) constitute a

mechanism. Also, column 4, lines 18-23 explain that this mechanism (103 and 107) allows the registration member (104 and 105) to be adjusted to different positions, e.g., to accommodate different length sheets. In other words, such adjustment aligns the registration feature (104 and 105) with the trailing edge of a specific length sheet in each position. Finally, it is noted that this alignment of the registration feature (104 and 105) causes the trailing edge of each sheet, which is inserted into the cassette (14), to be aligned with the print axis of the printer (i.e., axis of element 42). More specifically, the trailing edge is aligned parallel to the print axis. See, e.g., Fig. 1 of the Takahashi patent. Accordingly, the Takahashi patent meets all of the limitations of claim 1.

Regarding claim 3, the registration feature (including 104 and 105) is located on a media sheet support surface (shown in Fig. 3).

Regarding claim 4, the media sheet support surface (Fig. 3) is removeably attached to the printer. More specifically, Fig. 2 shows that the entire cassette 14 including the support surface (shown in Fig. 3) is removable from the rest of the printer.

Regarding claim 5, the printer accepts media sheets (18) loaded into the printer from above and the support surface (shown in Fig. 3) is located above the printer. In particular, the manual insertion guide of Fig. 5 allows media sheets (18) to be loaded from above. Also, Fig. 1 shows that the support surface extends above the printer.

Regarding claim 6, the support surface (shown in Fig. 3) is attached to the printer via at least one bracket (near 91 in Fig. 3).

Regarding claim 8, Figs. 1-3 show that the bracket (near 91 in Fig. 3) is adapted to allow the support surface (shown in Fig. 3) in the cassette (14) to be displaced

Art Unit: 3653

relative to the print axis (i.e., axis of element 42) so that a media sheet (18) aligned to the registration feature (including 104 and 105) can be aligned to the print axis (i.e., axis of element 42). More specifically, Figs. 1-3 show that the cassette (14) with the support surface and the bracket (near 91 in Fig. 3) can be moved relative to the cassette-mounting portion (30) (e.g., can be inserted or pulled out). Also, Fig. 1 shows that when cassette (14) is inserted into the cassette-mounting portion (30), the media sheet (18), which is aligned to the registration feature (including 104 and 105), is also aligned to the print axis (i.e., axis of member 42).

Regarding claim 9, the at least one registration feature (including 104 and 105) includes a protruding lip (105).

Regarding claim 10, the at least one registration feature (including 104 and 105) includes a groove (near 103 and between protrusions shown in Fig. 4).

Regarding claim 12, Fig. 1 shows that the printer includes a roll feed media compartment cover (including 12) and the at least one registration feature (including 104 and 105) is located on the roll feed media compartment cover (including 12). In as much as applicant's registration feature is located on a roll feed media cover, the registration feature (including 104 and 105) of Takahasi is also located on a cover as claimed.

Regarding claim 13, the at least one registration feature includes a proximity sensor (including 26) for detecting the location of the trailing edge of the media sheet (18). See column 7, line 45 to column 8, line 21 and column 8, lines 55-61.

3. Claims 1, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,350,073 (Mc Cue, Jr. et al.).

Regarding claim 1, Figs. 1 and 5 show an alignment device (including 35) for aligning a media sheet (85) with a print axis of a printer (i.e., axis 92), the media sheet (85) having a leading edge (near 88) and a trailing edge (near 35), the device including at least one registration feature (including 35) for aligning the trailing edge (near 35) of the media sheet (85) in a direction that is parallel to the print axis of the printer, and a mechanism (Fig. 1 and column 6, line 46) for adjusting the direction of alignment (i.e., adjusting 35 in a direction into or out of the printer) of the registration feature (including 35) so that the direction (i.e., the direction of aligning the trailing edge of the media sheet) is aligned with the print axis of the printer (i.e., axis 92) wherein the registration feature (including 35), when in use, is stationary relative to the printer.

To clarify, claim 1, as now amended, can be interpreted to mean that the mechanism adjusts the direction of alignment of the registration feature so that the direction of the trailing edge of the media sheet is aligned with the print axis of the printer. First, it is noted that the dictionary defines the word mechanism as “a. A mechanical device: MACHINE. b. Arrangement of machine parts.” Based on this definition, it is the examiner’s position that the structure that allows the registration member (including 35) to slide in and out constitutes a mechanism. Such structure allows the registration member (including 35) to be adjusted to different positions, e.g., to accommodate different length sheets. In other words, such adjustment aligns the registration feature (including 35) with the trailing edge of a specific length sheet in each

position. Finally, it is noted that this alignment of the registration feature (including 35) causes the trailing edge of each sheet, which is inserted into the printer, to be aligned parallel to the print axis of the printer (i.e., axis 92). See, e.g., Figs. 1 and 5 of the McCue, Jr. et al. patent. Accordingly, the McCue, Jr. et al. patent meets all of the limitations of claim 1.

Regarding claim 9, Figs. 1 and 5 show that the at least one registration feature (including 35) has a protruding lip (35).

Regarding claim 12, Figs. 1 and 14 show that the printer includes a roll feed media compartment cover (including 24) and the at least one registration feature (including 35) is located on the roll feed media compartment cover (including 24). In as much as applicant's registration feature is located on a roll feed media cover, the registration feature (including 35) of McCue et al. is also located on a cover as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Japanese Publication No. 59-203017. The Takahashi patent discloses all of the elements, except for the lock.

Fig. 10 of Japanese Publication No. 59-203017 shows that it is well known to provide a sheet handling apparatus with a locking mechanism (including 21c and 700)

for securely fastening a sheet holder (including 21) to the sheet handling apparatus. It would have been obvious to one of ordinary skill at the time of the invention, to provide the Takahashi apparatus with a locking mechanism in order to securely fasten the paper holder (i.e., with the support surface) to the printer, as shown in Japanese Publication No. 59-203017.

Response to Amendment

5. Applicant's arguments filed January 9, 2006 have been fully considered but they are not persuasive.

Applicant argues that claim 1, as amended, recites "a mechanism for adjusting a direction of alignment of the registration feature. This feature is not disclosed or suggested by Takahashi or McCue, Jr. et al. Each of these references disclose a member (sliding length adjustment lever 35 in McCue, Jr. et al. and size regulating plate 104 in Takahashi) that can be moved to accommodate media sheets having different lengths. In both cases, the direction of the member relative to a printing device is fixed. Neither of these references discloses or suggests adjusting the direction of alignment of a registration feature. This is presumed to be unnecessary.

In response, it is noted that claim 1 as amended recites at least one registration feature for **aligning the trailing edge** of the media sheet **in a direction** that is parallel to the print axis of the printer, and a mechanism for adjusting **the direction of alignment of the registration feature** so that the direction is aligned with the print axis of the printer. The underlined portion of claim 1 can be interpreted to mean the direction

Art Unit: 3653

of aligning the trailing edge of the media sheet. As such, claim 1 can be interpreted to have a direction of aligning the trailing edge of the media sheet, a direction of alignment of the registration feature, and a mechanism for adjusting the direction of alignment of the registration feature so that the direction (i.e., the direction of aligning the trailing edge of the media sheet) is aligned with the print axis of the printer. With this interpretation, the Takahashi and McCue, Jr. et al. patents read on independent claim 1, as described in greater detail in the rejections above. The rejections of the dependent claims are also outlined above.

Allowable Subject Matter

6. Claims 11, 14 and 16 are allowed.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3653

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571)-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600